

REMARKS

Claims 6 and 16 are independent and stand rejected under 35 U.S.C. § 103 as being unpatentable over APA in view of O'Neill. This rejection is respectfully traversed for the following reasons.

Claim 6 recites in pertinent part, “wherein said first read pointer, first write pointer, second read pointer and second write pointer *are separated* from said first boundary pointer and said second boundary pointer, *and* each of said first read pointer, first write pointer, second read pointer, second write pointer, said first boundary pointer and said second boundary pointer, *is capable of changing in a circulating fashion within the plurality of address locations of the ring buffer.*” Claim 16 defines a similar feature in method format. The Examiner alleges that Applicant’s previously filed arguments that “APA is directed to a memory whereby the alleged boundary pointers of APA are in fact read pointers (i.e., read pointers that function as boundaries)” appears to be a contradictory argument. In this regard, the Examiner asserts that “if a read pointer functions as a boundary, then it also must be a boundary pointer.”

In order to expedite prosecution, claims 6 and 16 have been amended to clarify the difference between distinct read/boundary pointers, and a single pointer that can function as both a read and boundary pointer. That is, claims 6 and 16 now embody “wherein said first read pointer, first write pointer, second read pointer and second write pointer *are separated* from said first boundary pointer and said second boundary pointer.” In contrast, as best, APA discloses a single combined read/boundary pointer. APA does not disclose a boundary pointer that is separated from read pointer, let alone

one being capable of changing in a circulating fashion within a plurality of address locations of the ring buffer. APA discloses only a read pointer which functions as a boundary pointer. Therefore, the first-in, first-out memory device of APA results in an under-utilization of the available memory space allocated for the FIFO.

O'Neill, on the other hand, does not disclose a boundary pointer which is separated from a read pointer and which is also capable of changing in a circulating fashion within a plurality of address location of the ring buffer. O'Neill discloses only that each of the address locations acts as one ring, whereby the first-in, first out memory device as a whole does not act as one ring. The boundary pointers of O'Neill therefore do not change in a circulating fashion within the ring buffer.

Accordingly, neither APA nor O'Neill, alone or in combination, disclose or suggest the claimed combinations. The Examiner is directed to MPEP § 2143.03 under the section entitled "All Claim Limitations Must Be Taught or Suggested", which sets forth the applicable standard:

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. (citing *In re Royka*, 180 USPQ 580 (CCPA 1974)).

In the instant case, the pending rejection does not "establish *prima facie* obviousness of [the] claimed invention" as recited in claims 6 and 16 because the proposed combination fails the "all the claim limitations" standard required under § 103.

Under Federal Circuit guidelines, a dependent claim is nonobvious if the independent claim upon which it depends is allowable because all the limitations of the independent claim are contained in the dependent claims, *Hartness International Inc. v. Simplimatic Engineering Co.*, 819F.2d at 1100, 1108 (Fed. Cir. 1987). Accordingly, as

the independent claims are patentable for the reasons set forth above, it is respectfully submitted that all claims dependent thereon are also patentable. In addition, it is respectfully submitted that the dependent claims are patentable based on their own merits by adding novel and non-obvious features to the combination. Based on all the foregoing, it is submitted that all pending claims are patentable over the cited prior art. Accordingly, it is respectfully requested that the pending rejections be withdrawn.

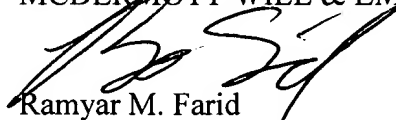
CONCLUSION

Having fully and completely responded to the Office Action, Applicants submit that all of the claims are now in condition for allowance, an indication of which is respectfully solicited. If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, the Examiner is requested to call Applicants' attorney at the telephone number shown below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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